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(54) Description Refuse container

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REFUSE CONTAINER

The present invention relates to a refuse container for households in accordance with the preamble of claim 1.

Such a refuse container is known in the art. It is well suited to the disposal of household refuse when that refuse is placed in a refuse container without sorting it first, and is collected by
5 a refuse truck.

However, more and more towns and local authorities are no longer collecting household refuse as a single entity, but are providing additional containers (refuse containers or bags) for collection following sorting.

10 Providing additional refuse containers, in particular rigid containers, requires at least one additional stowage space per household, depending on the degree of sorting. In some cases, two additional stowage spaces are required.

Householders are objecting to this trend as older properties do not cater for this additional requirement for stowage space.

15 In general, detached and semi-detached houses have only one refuse container; larger dwellings have just enough stowage space for current needs.

Towns and local authorities which require household refuse to be separated into organic and other refuse generally use a two-weekly collection cycle, which means that organic refuse is collected one week and the next week, the other refuse is collected by refuse truck.

20 Even though refuse separation is now accepted by most households, there is a problem in that for the same disposal volume, a second container and a second stowage space must be provided.

The present invention aims to further develop a refuse container of the type described so that it can separately contain and dispose of at least two types of refuse without having to convert
25 existing refuse trucks and without having to find additional stowage space.

This aim is achieved by dint of a refuse container of the type described with the characterizing features of claim 1.

It is characterized in that an intermediate base is provided which extends parallel to the base between the four side walls, in that the side wall opposite to the hinge is almost completely open, and in that at least two identical sliding boxes which are open at the top can be slidably inserted into the refuse container through the almost completely open side wall and on the base and on the at least one intermediate base, in that a front wall of each sliding box, carrying a handle, closes the almost completely open side wall in a substantially flush manner following insertion, so that the refuse for disposal is placed in the uppermost sliding box and is then emptied from the refuse container in the usual manner via the lid while the at least one further sliding box remains in place and serves to take only the appropriate refuse.

To operate the refuse container of the invention, the pre-sorted refuse is placed in the corresponding sliding box and depending on which refuse is to be collected, this sliding box is slid into the uppermost position, while the other sliding box or boxes either remain further down in the refuse container or are temporarily removed during the collection period.

In order to allow the sliding box to be emptied more easily, the side walls of the sliding box advantageously taper slightly inwardly and downwardly.

So that no refuse can stick in sharp corners, a further advantageous feature is that there are roundings between the base and side walls of the sliding box.

Advantageously, the handle is formed as a recessed grip so that the refuse container has no projecting parts which could catch on anything.

In order to ensure that the sliding boxes cannot fall out, the free edge of the at least one intermediate base is provided with a locking device for the sliding boxes inserted above and below the intermediate base; preferably, said locking device is a toggle. However, other known locking devices may be used.

In particular, when the refuse container is large, in order to be able to transport it more easily, the refuse container has two spaced wheels with coaxial axles in the lower portion of the side wall carrying the hinge.

The refuse container is advantageously produced from plastics material.

5 Two preferred embodiments of the refuse container of the invention will now be described with the help of the accompanying drawings, which show:

In Figure 1, a diagrammatic side view of the open side wall of a first embodiment;

In Figure 2, a perspective illustration of a sliding box which has been removed;

In Figure 3, a rear view of Figure 1; and

10 In Figure 4, a side view of the open side of another embodiment.

Referring now to Figure 1, a refuse container has a base 1 and side walls 2 and 3. The side walls, shown in Figure 3 as the rear side wall 4, are connected at the top by a circumferential rim 10 on which a lid 7 with two handles 8, 8' is pivotally mounted via a hinge 6 (see Figure 3).

The refuse container in Figure 1 is divided about half way up its height by an
15 intermediate base 9 which extends to the surrounding side walls.

Above the intermediate base 9 is a sliding box 11 which has a recessed grip 12 on its front side.

A further sliding box 11' of identical construction sits on the base 1 of the refuse container; said sliding box 11' also has a recessed grip 12.

20 Both sliding boxes 11 and 11' have slightly inwardly and downwardly tapering side walls, as can be seen in Figure 1.

Figure 2 shows a sliding box 11 in perspective view, with a front wall 111 and side walls 112, 113 and 114 connected to a base 115. The corners are slightly rounded, as can be seen in Figure 2.

25 Figure 3 shows the rear side of the refuse container of Figure 1; the hinge 6, which allows the lid 7 to pivot, is shown diagrammatically.

In the lower region of the side wall 4, i.e. on the edge on which the hinge 6 is mounted, two wheels 14 and 14' are mounted on coaxial axles, to allow the refuse container to be rolled along when the refuse container is tipped.

Figure 4 shows an embodiment wherein the intermediate base 9 is positioned about one
 5 third up the height of the refuse container. The two sliding boxes 11, 11' are smaller than in the previous embodiment so the sliding boxes fit into the space between the base and the intermediate base 9. The opening in the almost completely open side wall is smaller in this embodiment; beneath the rim 10 is a closed region approximately the height of one sliding box.

With an emptying cycle of two weeks, this embodiment has the advantage that, for a
 10 virtually steady amount of household refuse, about the same amount of stowage space is available for organic refuse and other refuse. The lower sliding box takes one weeks' worth of refuse and the upper box, along with the space above it, takes two weeks' worth of refuse. Side walls 2, 3 and 4, optionally have a bead (not shown) provided at the level of the upper edge of the sliding box 11 to prevent refuse from falling into the space between the sliding box and the
 15 side walls.

The refuse container is advantageously formed from plastic material, and the various sliding boxes 11, 11' may be produced in different colours to allow them to be readily distinguished, or they may carry a coloured label on their front side 111.

CLAIMS

1. A refuse container for households with a generally square outline in top view, a base (1) and four side walls (2, 3, 4) with an upper circumferential rim (10) and a lid (7) with at least one handle (8, 8') pivotally mounted on a hinge (6), characterized in that at least one
5 intermediate base (9) is provided which extends parallel to the base (1) between the four side walls, in that the side wall opposite to the hinge (6) is almost completely open, in that at least two identical sliding boxes (11, 11') which are open at the top can be slidably inserted into the refuse container through the almost completely open side wall and on the base (1) and on the at least one intermediate base (9), and in that a front wall (111) of
10 each sliding box (11, 11'), carrying a handle, closes the almost completely open side wall in a substantially flush manner following insertion.
2. A refuse container according to claim 1, characterized in that the side walls (112, 113, 114) of the sliding boxes (11, 11') taper slightly downwardly and inwardly.
3. A refuse container according to claim 2, characterized in that the sliding boxes (11, 11')
15 are rounded between the base (115) and the side walls (112, 113, 114).
4. A refuse container according to one of the preceding claims, characterized in that the handle is formed as a recessed grip (12).
5. A refuse container according to one of the preceding claims, characterized in that the free edge of the at least one intermediate base (9) is provided with a locking device for the
20 sliding boxes (11, 11') inserted above and below the intermediate base.
6. A refuse container according to claim 5, characterized in that the locking device (13) is a toggle (13).
7. A refuse container according to one of the preceding claims, characterized in that the refuse container has two spaced wheels (14, 14') on coaxial axles in the lower region of
25 the side wall (4) carrying the hinge (6).

8. A refuse container according to one of the preceding claims, characterized in that it is produced from plastic material.